

10/531,252

**EAST Search History**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	432	(423/440).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/11/09 20:37
L3	432	(423/439).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/11/09 20:49
L4	1122	(502/339).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/11/09 21:27
L5	223	(562/534).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/11/09 21:33

(FILE 'HOME' ENTERED AT 20:15:16 ON 09 NOV 2007)

FILE 'CAPLUS' ENTERED AT 20:15:32 ON 09 NOV 2007

=> s palladium acetate

172202 PALLADIUM

548995 ACETATE

L1 2338 PALLADIUM ACETATE  
(PALLADIUM(W) ACETATE)

=> s l1 and reduction

331955 REDUCTION

L2 71 L1 AND REDUCTION

=> s l2 and propylene

192137 PROPYLENE

L3 3 L2 AND PROPYLENE

=> d 1-3 bib abs

L3 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:1239513 CAPLUS

DN 143:478359

TI Palladium catalysts, their manufacture, and manufacture of  
 $\alpha,\beta$ -unsaturated carboxylic acids using them

IN Oyauchi, Takeshi

PA Mitsubishi Rayon Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005324084	A	20051124	JP 2004-142313	20040512
PRAI	JP 2004-142313		20040512		

AB The manufacturing method contains reducing Pd compds. with Pd atom in the  
oxidation  
state using olefins and aldehydes sep. or simultaneously. Thus, treating  
palladium acetate with propylene then with  
formaldehyde and liquid-phase-oxidizing isobutylene in the presence of the  
resulting Pd catalyst with O gave methacrylic acid with an yield 11.6%.

L3 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2002:794351 CAPLUS

DN 137:295352

TI Method and solution-suspended particulate palladium catalyst for the  
manufacture of acrylic or methacrylic acids via the oxidation of  
propylene or isobutylene

IN Unruh, Jerry D.; Diaz, Norma Jean; Molina, Robert Ray; Snyder, Phillip  
Sidney; Windhorst, Kenneth Allen

PA USA

SO U.S. Pat. Appl. Publ., 10 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002151747	A1	20021017	US 2001-833945	20010412
	CA 2412307	A1	20021024	CA 2002-2412307	20020411
	WO 2002083299	A2	20021024	WO 2002-US11386	20020411
	WO 2002083299	A3	20030227		

W: AU, BR, CA, CN, CZ, ID, IN, JP, KR, MX, SG, US, ZA  
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE, TR

AU 2002258767	A1	20021028	AU 2002-258767	20020411
BR 2002004827	A	20030617	BR 2002-4827	20020411
EP 1377372	A2	20040107	EP 2002-728734	20020411
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
JP 2004519326	T	20040702	JP 2002-581095	20020411
IN 2002KN01506	A	20040717	IN 2002-KN1506	20021210
ZA 2002010038	A	20031211	ZA 2002-10038	20021211
MX 2002PA12317	A	20040906	MX 2002-PA12317	20021211
US 2004181082	A1	20040916	US 2003-415714	20030919
PRAI US 2001-833945	A	20010412		
WO 2002-US11386	W	20020411		

AB A method for the manufacture of acrylic acid or methacrylic acid by the oxidation

of propylene or isobutylene is achieved by: (a) reducing palladium acetate to unsupported palladium with propylene in an oxygen-free single- or two-phase aqueous solution containing as a co-solvent a maximum concentration of a C2-C6 carboxylic acid or C3-C6

ketone

in a reactor adapted for continuous-phase production; (b) adding air and propylene or isobutylene in a continuous manner; (c) recovering the acrylic acid or methacrylic acid formed; and (d) recycling the solvent to the reactor.

L3 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1999:460916 CAPLUS

DN 131:162532

TI Charging Processes in Electroactive C60/Pd Films: Effect of Solvent and Supporting Electrolyte

AU Winkler, Krzysztof; De Bettencourt-Dias, Ana; Balch, Alan L.

CS Department of Chemistry, University of California, Davis, CA, 95616, USA

SO Chemistry of Materials (1999), 11(8), 2265-2273

CODEN: CMATEX; ISSN: 0897-4756

PB American Chemical Society

DT Journal

LA English

AB The electrochem. properties of solid films deposited on an electrode surface by simultaneous electrochem. reduction of C60 and palladium(II) acetate trimer in an acetonitrile/toluene mixture have been studied using cyclic voltammetry. The electrochem. switching between the doped (conducting) and undoped (nonconducting) states involves both electron and ion transport within the film. The overall control of charge percolation through the C60/Pd electroactive material is governed by the transport of cations. The ion transport depends both on the nature of solvent and supporting electrolyte. The size of solvent mol. is the major factor determining the degree of solvent swelling of the layer. In the case of small solvent mols., the C60/Pd film exhibits a reversible redox behavior. For larger mol. solvents, the voltammograms show a departure from reversibility. The reduction of the layer is accompanied by changes in its morphol. allowing for the solvent swelling of the film also in the case of large mol. solvents. The electrochem. response of the layer is not affected by the anions of the supporting electrolyte. However, a strong influence of both nature and concentration of supporting electrolyte cations on the redox properties of the layer is observed, since these cations are incorporated into the C60/Pd layer. The redox ability in solns. containing large cations is considerably reduced. The activation of the film at neg. potentials results in an increase of the doping level. The stability of the films is affected by the potential range over which they are examined. Scanning to highly neg. potentials results in the loss of redox activity due to removal of the film from the electrode surface.

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s reduction of palladium

331955 REDUCTION

172202 PALLADIUM

L4 728 REDUCTION OF PALLADIUM  
(REDUCTION(1W) PALLADIUM)

=> s l4 and propylene

192137 PROPYLENE

L5 4 L4 AND PROPYLENE

=> d 1-4 bib abs

L5 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN

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DN 137:295352

TI Method and solution-suspended particulate palladium catalyst for the manufacture of acrylic or methacrylic acids via the oxidation of propylene or isobutylene

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PA USA

SO U.S. Pat. Appl. Publ., 10 pp.

CODEN: USXXCO

DT Patent

LA English

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	CA 2412307	A1	20021024	CA 2002-2412307	20020411
	WO 2002083299	A2	20021024	WO 2002-US11386	20020411
	WO 2002083299	A3	20030227		
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	EP 1377372	A2	20040107	EP 2002-728734	20020411
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	IN 2002KN01506	A	20040717	IN 2002-KN1506	20021210
	ZA 2002010038	A	20031211	ZA 2002-10038	20021211
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	US 2004181082	A1	20040916	US 2003-415714	20030919
PRAI	US 2001-833945	A	20010412		
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concentration of a C2-C6 carboxylic acid or C3-C6 ketone in a reactor adapted for

continuous-phase production; (b) adding air and propylene or isobutylene in a continuous manner; (c) recovering the acrylic acid or methacrylic acid formed; and (d) recycling the solvent to the reactor.

L5 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1995:197562 CAPLUS

DN 122:16036  
 TI The performance of Pd, Pt, and Pd-Pt catalysts in lean exhaust  
 AU Beck, Donald D.; Monroe, David R.; DiMaggio, Craig L.; Sommers, John W.  
 CS General Motors Research, USA  
 SO Society of Automotive Engineers, [Special Publication] SP (1993),  
 SP-957(U.S. and European Automotive Emissions Technology), 71-83  
 CODEN: SAESA2; ISSN: 0099-5908  
 DT Journal  
 LA English  
 AB A matrix of pelleted catalysts composed of Pt, Pd, Pt co-impregnated with  
 Pd, and Pt phys. mixed with Pd supported on Al<sub>2</sub>O<sub>3</sub> were compared with the  
 same noble metal formulations supported on CeO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> for light-off and  
 warmed-up performance in net lean exhaust. These catalysts were tested as  
 prepared (fresh) and following a relatively severe thermal aging treatment  
 (cycled between net lean and net rich environment at 1000°C for 4  
 h). Pd showed better light-off performance than Pt for catalyzing the  
 oxidation of propylene, while Pt showed better light-off and  
 warmed-up performance than Pd for catalyzing the oxidation of propane.  
 Having both Pt and Pd present as a result of co-impregnation or phys.  
 mixture results in good light-off and warmed-up performance for the  
 conversion of both types of hydrocarbons. The presence of CeO<sub>2</sub> generally  
 decreases light-off performance for most of these catalysts.

L5 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1990:422873 CAPLUS  
 DN 113:22873  
 TI Homogeneous catalytic reduction of nitric oxide by olefins in the presence  
 of palladium(II) chloride  
 AU Cheng, C. H.; Sun, K. S.  
 CS Dep. Chem., Natl. Tsing Hua Univ., Hsinchu, 30043, Taiwan  
 SO Inorganic Chemistry (1990), 29(13), 2547-8  
 CODEN: INOCAJ; ISSN: 0020-1669  
 DT Journal  
 LA English  
 AB An aqueous solution of PdCl<sub>2</sub> and CuCl<sub>2</sub> catalyzes the reaction of NO with  
 terminal  
 olefins to give N<sub>2</sub>O and the corresponding 2-ketone or aldehyde. The rate  
 of catalysis at ambient temperature corresponds to 0.384, 0.255, 0.298, 0.190  
 turnovers/h per Pd ion based on N<sub>2</sub>O produced for ethylene,  
 propylene, 1-butene, and 1-hexene, resp. PdCl<sub>2</sub> alone in a  
 DMSO-H<sub>2</sub>O (9:1, volume/volume) mixture is also an effective catalyst for the  
 reduction of NO by terminal olefins. The observed catalysis is inhibited by  
 Cl<sup>-</sup>  
 and by H<sup>+</sup>.

L5 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1985:112790 CAPLUS  
 DN 102:112790  
 TI Studies on the reactivity of allylic compounds catalyzed by a palladium[0]  
 complex - the effect of leaving groups  
 AU Huang, Jiling; Li, Bihua; Lu, Xiyan  
 CS Shanghai Inst. Org. Chem., Acad. Sin., Shanghai, Peop. Rep. China  
 SO Kexue Tongbao (Foreign Language Edition) (1984), 29(8), 1038-41  
 CODEN: KHTPB; ISSN: 0454-0948  
 DT Journal  
 LA English  
 AB The effect of leaving groups X were determined in the reaction of the  
 RCH:CHCH<sub>2</sub>X [X = OAc, O<sub>2</sub>Cet, OP(O)(OCH<sub>2</sub>CH:CH<sub>2</sub>)<sub>2</sub>, OPh, Br, NH<sub>2</sub>, NHC(S)NH<sub>2</sub>,  
 etc.; R = e.g., H] with BH<sub>4</sub>, catalyzed by Pd(PPh<sub>3</sub>)<sub>4</sub>, to give  
 propylene. The best leaving group was OAc.